

The Market System and the Circular Flow

Every economy needs to develop an **economic system** to respond to the economizing problem of limited resources and unlimited wants. The two basic types of systems are the **command system** and the **market system**. In the command system, there is extensive public ownership of resources and the use of central planning for most economic decision making in the economy. In the market system there is extensive private ownership of resources and the use of markets and prices to coordinate and direct economic activity.

A major purpose of Chapter 2 is to explain the major characteristics of the market system because it is the one used in most nations. The first part of this section describes the **ideological** and **institutional** characteristics of the market system. In this system, most of the resources are owned as private property by citizens, who are free to use them as they wish in their own self-interest. Prices and markets express the self-interests of resource owners, consumers, and business firms. Competition regulates self-interest—to prevent the self-interest of any person or any group from working to the disadvantage of the economy and to make self-interests work for the benefit of the entire economy. Government plays an active, but limited, role in a market economy.

Three other characteristics are also found in a market economy. They are the employment of large amounts of **capital goods**, the development of **specialization**, and the **use of money**. Economies use capital goods and engage in specialization because this is a more efficient use of their resources; it results in larger total output and the greater satisfaction of wants. When workers, business firms, and regions within an economy specialize, they become dependent on each other for the goods and services they do not produce for themselves and they must engage in trade. Trade is made more convenient by using money as a medium of exchange.

The chapter also explains in detail how the market system works. There are **Five Fundamental Questions** that any economic system must answer in its attempt to use its scarce resources to satisfy its material wants. The five questions or problems are: (1) What goods and services will be produced? (2) How will the goods and services be produced? (3) Who will get the goods and services? (4) How will the system accommodate change? (5) How will the system promote progress?

The explanation of how the market system finds answers to the Five Fundamental Questions is only an approximation—a simplified explanation—of the methods actually employed by the U.S. economy and other market

economies. Yet this explanation contains enough realism to be truthful and is general enough to be understandable. If the aims of this chapter are accomplished, you can begin to understand the market system and methods our economy uses to solve the economizing problem presented in Chapter 1.

Although central planning served as a powerful form of economic decision-making in command systems such as the Soviet Union and China (before its market reform), it had two serious problems. The first problem was one of **coordination**, which resulted in production bottlenecks and managers and bureaucrats missing production targets. Central planning also created an **incentive problem** because it sent out incorrect and inadequate signals for directing the efficient allocation of an economy's resources and gave workers little reason to work hard. The lack of incentives killed entrepreneurship and stifled innovation and technological advance.

The chapter ends with a description of the **circular flow model** (or **diagram**). In a market economy, there is a resource market and product market that connect households and businesses. There is also a flow of money and flows of goods and services and resources that indicate that households and businesses have dual roles as buyers and sellers depending on whether they are operating in the product market or resource market.

■ CHECKLIST

When you have studied this chapter you should be able to

- ☐ Compare and contrast the command system with the market system.
- ☐ Identify the nine important characteristics of the market system.
- ☐ Describe the role of private property rights in the market system.
- ☐ Distinguish between freedom of enterprise and freedom of choice.
- ☐ Explain why self-interest is a driving force of the market system.
- ☐ Identify two features of competition in the market system.
- ☐ Explain the roles of markets and prices in the market system.
- ☐ Describe how the market system relies on technology and capital.
- ☐ Discuss how two types of specialization improve efficiency in the market system.

- ☐ Describe the advantages of money over barter for the exchange of goods and services in the market system.
- ☐ Describe the size and role of government in the market system.
- ☐ List the Five Fundamental Questions to answer about the operation of a market economy.
- ☐ Explain how a market system determines what goods and services will be produced and the role of consumer sovereignty and dollar votes.
- ☐ Explain how goods and services will be produced in a market system.
- ☐ Find the least costly combination of resources needed for production when given the technological data and the prices of the resources.
- ☐ Explain how a market system determines who will get the goods and services it produces.
- ☐ Describe the guiding function of prices to accommodate change in the market system.
- ☐ Explain how the market system promotes progress by fostering technological advances and capital accumulation.
- ☐ State how the "invisible hand" in the market system tends to promote public or social interests.
- ☐ List three virtues of the market system.
- ☐ Compare how a command economy coordinates economic activity with how a market economy coordinates economic activity.
- ☐ Explain the problems with incentives in a command economy.
- ☐ Draw the circular flow model, correctly labeling the two markets and the real and money flows between the two markets.
- ☐ Describe the role private property plays in helping a market economy find the most productive combination of resources (Last Word).

■ CHAPTER OUTLINE

1. An **economic system** is a set of institutions and a coordinating mechanism to respond to the economizing problem for an economy.
 - a. The **command system** (also called *socialism* or *communism*) is based primarily on extensive public ownership of resources and the use of central planning for most economic decision making. There used to be many examples of command economies (Soviet Union), but today there are few (North Korea, Cuba). Most former socialistic nations have been or are being transformed into capitalistic and market-oriented economies.
 - b. The **market system** (*capitalism*) has extensive private ownership of resources and uses markets and prices to coordinate and direct economic activity. In pure (*laissez-faire*) capitalism there is a limited government role in the economy. In a capitalist economy such as the United States, government plays a large role, but the two characteristics of the market system—private property and markets—dominate.
2. The market system has the following nine characteristics.
 - a. Private individuals and organizations own and control their property resources by means of the institution of **private property**.

- b. These individuals and organizations possess both the **freedom of enterprise** and the **freedom of choice**
- c. These economic units are motivated largely by **self-interest**.
- d. **Competition** is based on the independent actions of buyers and sellers. They have the freedom to enter or leave markets. This competition spreads economic power and limits its potential abuse.
- e. A **market** is a place, institution, or process where buyers and sellers interact with each other. Markets and prices are used to communicate and coordinate the decisions of buyers and sellers.
- f. The market system employs complicated and advanced methods of production, new technology, and large amounts of capital equipment to produce goods and services efficiently.
- g. It is a highly specialized economy. Human and geographic **specialization** increase the productive efficiency of the economy. Human specialization is also called **division of labor**. It increases productivity because it allows people to split up work into separate tasks and lets people do the task which they are best at doing. Geographic specialization lets nations produce what they do best and then trade with other nations for what else they want.
- h. It uses **money** exclusively to facilitate trade and specialization. Money functions as a **medium of exchange** that is more efficient to use than **barter** for trading goods.
- i. Government has an active but limited role.

3. The system of prices and markets and households' and business firms' choices furnish the market economy with answers to **Five Fundamental Questions**.

- a. *What goods and services will be produced?* In a market economy, there is **consumer sovereignty** because consumers are in command and express their wishes for the goods and services through **dollar votes**. The demands of consumers for products and the desires of business firms to maximize their profits determine what and how much of each product is produced and its price.
- b. *How will the goods and services be produced?* The desires of business firms to maximize profits by keeping their costs of production as low as possible guide them to use the most efficient techniques of production and determine their demands for various resources; competition forces them to use the most efficient techniques and ensures that only the most efficient will be able to stay in business.
- c. *Who will get the goods and services?* With resource prices determined, the money income of each household is determined; and with product prices determined, the quantity of goods and services these money incomes will buy is determined.
- d. *How will the system accommodate change?* The market system is able to accommodate itself to changes in consumer tastes, technology, and resource supplies. The desires of business firms for maximum profits and competition lead the economy to make the appropriate adjustments in the way it uses its resources.

e. *How will the system promote progress?* Competition and the desire to increase profits promote better techniques of production and capital accumulation.

(1) The market system encourages technological advance because it can help increase revenue or decrease costs for businesses, thus increasing profits. The use of new technology spreads rapidly because firms must stay innovative or fail. There can also be **creative destruction** where new technology creates market positions of firms adopting the new technology and destroys the market position of firms using the old technology.

(2) Business owners will take their profit income and use it to make more capital goods that improve production and increase profits.

4. Competition in the economy compels firms seeking to promote their own interests to promote (as though led by an "**invisible hand**") the best interests of society as a whole.

a. Competition results in an allocation of resources appropriate to consumer wants, production by the most efficient means, and the lowest possible prices.

b. Three noteworthy merits of the market system are

(1) The *efficient* use of resources

(2) The *incentive* the system provides for productive activity

(3) The personal *freedom* allowed participants as consumers, producers, workers, or investors.

5. The demise of command systems occurred largely because of two basic problems with a centrally planned economy.

a. The *coordination problem* involved the difficulty of coordinating the economy's many interdependent segments and avoiding the chain reaction that would result from a bottleneck in any one of the segments. This coordination problem became even more difficult as the economy grew larger and more complex, and more economic decisions had to be made in the production process. There were also inadequate measures of economic performance to determine the degree of success or failure of enterprises or to give clear signals to the economy.

b. The *incentive problem* arose because in a command economy incentives are ineffective for encouraging economic initiatives and work and for directing the most efficient use of productive resources. In a market economy, profits and losses signal what firms should produce, how they should produce, and how productive resources should be allocated to best meet the wants of a nation. Central planning in the two economies also lacked entrepreneurship and stifled innovation, both of which are important forces for achieving long-term economic growth. Individual workers lacked much motivation to work hard because pay was limited and there were either few consumer goods to buy or they were of low quality.

6. The **circular flow model** or **diagram** is a device used to clarify the relationships between households and business firms in a market economy. In the **resource market**, households sell and firms buy resources, and in the **product market**, the firms sell and households buy products. Households use the incomes they obtain from selling resources

to purchase the goods and services produced by the firms, and in the economy there is a real flow of resources and products and a money flow of incomes and expenditures.

7. (Last Word). There are tens of billions of ways that resources could be arranged in a market economy, but most combinations would be useless. The reason that a market economy produces the few combinations from the total possible that are productive and serve human goals is because of private property. With it, people have an incentive to make the best use of their resources and find the most rewarding combination.

■ HINTS AND TIPS

1. This chapter describes nine characteristics and institutions of a market system. After reading the section, check your understanding by listing the nine points and writing a short explanation of each one.

2. The section on the *Five Fundamental Questions* is both the most important and the most difficult part of the chapter. Detailed answers to the five questions are given in this section of the chapter. If you examine each one individually and in the order in which it is presented, you will more easily understand how the market system works. (Actually, the market system finds the answers simultaneously, but make your learning easier for now by considering them one by one.)

3. Be sure to understand the *importance* and *role* of each of the following in the operation of the market system: (1) the guiding function of prices, (2) the profit motive of business firms, (3) the entry into and exodus of firms from industries, (4) the meaning of competition, and (5) consumer sovereignty.

■ IMPORTANT TERMS

economic system	medium of exchange
command system	barter
market system	money
private property	consumer sovereignty
freedom of enterprise	dollar votes
freedom of choice	creative destruction
self-interest	"invisible hand"
competition	circular flow diagram
market	resource market
specialization	product market
division of labor	

SELF-TEST

■ FILL-IN QUESTIONS

1. The institutional arrangements and coordinating mechanisms used to respond to the economic problem are called (*laissez-faire*, an economic system) _____.

2. In a command economy, property resources are primarily (publicly, privately) _____ owned. The coordinating device(s) in this economic system (is central planning, are markets and prices) _____.

3. In capitalism, property resources are primarily (publicly, privately) _____ owned. The means used to direct and coordinate economic activity (is central planning, are markets and prices) _____.

4. The ownership of property resources by private individuals and organizations is the institution of private (resources, property) _____. The freedom of private businesses to obtain resources and use them to produce goods and services is the freedom of (choice, enterprise) _____, while the freedom to dispose of property or money as a person sees fit is the freedom of _____.

5. Self-interest means that each economic unit attempts to do what is best for itself, but this might lead to an abuse of power in a market economy if it were not directed and constrained by (government, competition) _____. Self-interest and selfishness (are, are not) _____ the same thing in a market economy.

6. Broadly defined, competition is present if two conditions prevail; these two conditions are

a. _____

b. _____

7. In a capitalist economy, individual buyers communicate their demands and individual sellers communicate their supplies in the system of (markets, prices) _____, and the outcomes from economic decisions are a set of product and resource _____ that are determined by demand and supply.

8. In market economies, money functions chiefly as a medium of (commerce, exchange) _____. Barter between two individuals will take place only if there is a coincidence of (resources, wants) _____.

9. In a market system, government is active, but is assigned (a limited, an extensive) _____ role.

10. List the Five Fundamental Questions every economy must answer.

a. _____

b. _____

c. _____

d. _____

e. _____

11. Consumers vote with their dollars for the production of a good or service when they (sell, buy) _____ it, and because of this, consumers are said to be (dependent, sovereign) _____ in a market economy. The buying decisions of consumers (restrain, expand) _____ the possible choices of firms over what they produce so they make what is profitable.

12. Firms are interested in obtaining the largest economic profits possible, so they try to produce a product in the (most, least) _____ costly way. The most efficient production techniques depend on the available (income, technology) _____ and the (prices, quotas) _____ of needed resources.

13. The market system determines how the total output of the economy will be distributed among its households by determining the (incomes, expenditures) _____ of each household and by determining the (prices, quality) _____ for each good and service produced.

14. In market economies, change is almost continuous in consumer (preferences, resources) _____, in the supplies of _____, and in technology. To make the appropriate adjustments to these changes, a market economy allows price to perform its (monopoly, guiding) _____ function.

15. The market system fosters technological change. The incentive for a firm to be the first to use a new and improved technique of production or to produce a new and better product is a greater economic (profit, loss) _____, and the incentive for other firms to follow its lead is the avoidance of a _____.

16. Technological advance will require additional (capital, consumer) _____ goods, so the entrepreneur uses profit obtained from the sale of _____ goods to acquire (capital, consumer) _____ goods.

17. A market system promotes (unity, disunity) _____ between private and public interests. Firms and resource suppliers seem to be guided by (a visible, an invisible) _____

_____ hand to allocate the economy's resources efficiently. The two *economic* arguments for a market system are that it promotes (public, efficient) _____

_____ use of resources and that it uses (incentives, government) _____ for directing economic activity. The major *noneconomic* argument for the market system is that it allows for personal (wealth, freedom) _____.

18. Coordination and decision making in a market economy are (centralized, decentralized) _____, but in a command economy they are _____. The market system tends to produce a reasonably (efficient, inefficient) _____ allocation of resources, but in command economies it is _____ and results in production bottlenecks. As a command economy grows over time, the coordination problem becomes (more, less) _____ complex and indicators of economic performance are (adequate, inadequate) _____ for determining the success or failure of economic activities.
19. Another problem with the command economies is that economic incentives are (effective, ineffective) _____ for encouraging work or for giving signals to planners for efficient allocation of resources in the economy. Command economies do not have (production targets, entrepreneurship) _____ that is (are) important for technological advance, and because there was no business competition innovation (fostered, lagged) _____.

20. In the circular flow model,
- Households are buyers and businesses are sellers in (product, resource) _____ markets, and businesses are buyers and households are sellers in _____ markets.
 - The flow of economic resources and finished goods and services is the (money, real) _____ flow, and the flow of income and expenditures is the _____ flow.

■ TRUE-FALSE QUESTIONS

Circle T if the statement is true, F if it is false.

- A command economy is characterized by the private ownership of resources and the use of markets and prices to coordinate and direct economic activity. T F
- In a market system, the government owns most of the property resources (land and capital). T F
- Pure capitalism is also called *laissez-faire* capitalism. T F
- Property rights encourage investment, innovation, exchange, maintenance of property, and economic growth. T F
- The freedom of business firms to produce a particular consumer good is always limited by the desires of consumers for that good. T F
- The pursuit of economic self-interest is the same thing as selfishness. T F
- When a market is competitive, the individual sellers of a product are unable to reduce the supply of the product and control its prices. T F
- The market system is an organizing mechanism and also a communication network. T F
- Increasing the amount of specialization in an economy generally leads to the more efficient use of its resources. T F
- One way human specialization can be achieved is through a division of labor in productive activity. T F
- Money is a device for facilitating the exchange of goods and services. T F
- "Coincidence of wants" means that two persons want to acquire the same good or service. T F
- Shells may serve as money if sellers are generally willing to accept them as money. T F
- One of the Five Fundamental Questions is who will control the output. T F
- Industries in which economic profits are earned by the firms in the industry will attract the entry of new firms. T F
- The consumers are sovereign in a market economy and register their economic wants with "dollar votes." T F
- Economic efficiency requires that a given output of a good or service be produced in the least costly way. T F
- If the market price of resource A decreases, firms will tend to employ smaller quantities of resource A. T F
- The incentive that the market system provides to induce technological improvement is the opportunity for economic profits. T F
- Creative destruction is the hypothesis that the creation of new products and production methods simultaneously destroys the market power of existing monopolies and businesses. T F
- The tendency for individuals pursuing their own self-interests to bring about results that are in the best interest of society as a whole is often called the "invisible hand." T F
- A basic economic argument for the market system is that it promotes an efficient use of resources. T F
- A command economy is significantly affected by missed production targets. T F
- Profit is the key indicator of success and failure in a command economy. T F
- In the circular flow model, there is a *real flow* of economic resources and finished goods and services and a *money flow* of income and consumption expenditures. T F

■ MULTIPLE-CHOICE QUESTIONS

Circle the letter that corresponds to the best answer.

1. The private ownership of property resources and use of markets and prices to direct and coordinate economic activity is characteristic of
 - (a) socialism
 - (b) communism
 - (c) a market economy
 - (d) a command economy
2. Which is one of the main characteristics of the market system?
 - (a) central economic planning
 - (b) limits on freedom of choice
 - (c) the right to own private property
 - (d) an expanded role for government in the economy
3. In the market system, freedom of enterprise means that
 - (a) government is free to direct the actions of businesses
 - (b) businesses are free to produce products that consumers want
 - (c) consumers are free to buy goods and services that they want
 - (d) resources are distributed freely to businesses that want them
4. The maximization of profit tends to be the driving force in the economic decision making of
 - (a) workers
 - (b) consumers
 - (c) legislators
 - (d) entrepreneurs
5. How do consumers typically express self-interest?
 - (a) by minimizing their economic losses
 - (b) by maximizing their economic profits
 - (c) by seeking the lowest price for a product
 - (d) by seeking jobs with the highest wages and benefits
6. Which is a characteristic of competition as economists see it?
 - (a) a few sellers of all products
 - (b) the widespread diffusion of economic power
 - (c) a small number of buyers in product markets
 - (d) the relatively difficult entry into and exit from industries by producers
7. To decide how to use its scarce resources to satisfy economic wants, a market economy primarily relies on
 - (a) prices
 - (b) planning
 - (c) monopoly power
 - (d) production targets
8. The market system is a method of
 - (a) making economic decisions by central planning
 - (b) communicating and coordinating economic decisions
 - (c) promoting specialization, but not division of labor
 - (d) allocating money, but not economic profits or losses
9. When workers specialize in various tasks to produce a commodity, the situation is referred to as
 - (a) division of labor
 - (b) freedom of choice
 - (c) capital accumulation
 - (d) a coincidence of wants
10. In what way does human specialization contribute to an economy's output?
 - (a) It is a process of creative destruction.
 - (b) It serves as consumer sovereignty.
 - (c) It acts like an "invisible hand."
 - (d) It fosters learning by doing.
11. Which is a prerequisite of specialization?
 - (a) market restraints on freedom
 - (b) having a convenient means of exchanging goods
 - (c) letting government create a plan for the economy
 - (d) deciding who will get the goods and services in an economy
12. In the market system, the role of government is best described as
 - (a) limited
 - (b) extensive
 - (c) significant
 - (d) nonexistent
13. Which would necessarily result, sooner or later, from a decrease in consumer demand for a product?
 - (a) a decrease in the profits of firms in the industry
 - (b) an increase in the output of the industry
 - (c) an increase in the supply of the product
 - (d) an increase in the prices of resources employed by the firms in the industry
14. The demand for resources is
 - (a) increased when the price of resources falls
 - (b) most influenced by the size of government in a capitalist economy
 - (c) derived from the demand for the products made with the resources
 - (d) decreased when the product that the resources produce becomes popular

Answer Questions 15, 16, and 17 on the basis of the following information.

Suppose 50 units of product X can be produced by employing just labor and capital according to the four techniques (A, B, C, and D) shown below. Assume the prices of labor and capital are \$5 and \$4, respectively.

	A	B	C	D
Labor	1	2	3	4
Capital	5	3	2	1

15. Which technique is economically most efficient in producing product X?
 - (a) A
 - (b) B
 - (c) C
 - (d) D

16. If the price of product X is \$1, the firm will realize
 (a) an economic profit of \$28
 (b) an economic profit of \$27
 (c) an economic profit of \$26
 (d) an economic profit of \$25
17. Now assume that the price of labor falls to \$3 and the price of capital rises to \$5. Which technique is economically most efficient in producing product X?
 (a) A
 (b) B
 (c) C
 (d) D
18. Which is the primary factor determining the share of the total output of the economy received by a household?
 (a) the tastes of the household
 (b) the medium of exchange used by the household
 (c) the prices at which the household sells its resources
 (d) ethical considerations in the operation of a market economy
19. If an increase in the demand for a product and a rise in its price cause an increase in the quantity supplied, price is successfully performing its
 (a) guiding function
 (b) circular flow role
 (c) division-of-labor role
 (d) medium-of-exchange function
20. In the market system, if one firm introduces a new and better method of production that enhances the firm's economic profits, other firms will be forced to adopt the new method to
 (a) increase circular flow
 (b) follow rules for capital accumulation
 (c) avoid economic losses or bankruptcy
 (d) specialize and divide the labor in an efficient way
21. The advent of personal computers and word processing software that eliminated the market for electric typewriters would be an example of
 (a) specialization
 (b) derived demand
 (c) the "invisible hand"
 (d) creative destruction
22. The chief economic virtue of the competitive market system is that it
 (a) allows extensive personal freedom
 (b) promotes the efficient use of resources
 (c) provides an equitable distribution of income
 (d) eliminates the need for decision making
23. In the system of central planning, the outputs of some industries became the inputs for other industries, but a failure of one industry to meet its production target would cause
 (a) widespread unemployment
 (b) inflation in wholesale and retail prices
 (c) profit declines and potential bankruptcy of firms
 (d) a chain reaction of production problems and bottlenecks

24. The two kinds of markets found in the circular flow model are
 (a) real and money markets
 (b) real and socialist markets
 (c) money and command markets
 (d) product and resource markets
25. In the circular flow model, businesses
 (a) buy products and resources
 (b) sell products and resources
 (c) buy products and sell resources
 (d) sell products and buy resources

■ PROBLEMS

1. Use the appropriate number to match the terms with the phrases below.

- | | |
|-------------------------|-------------------------|
| 1. invisible hand | 4. consumer sovereignty |
| 2. coincidence of wants | 5. creative destruction |
| 3. division of labor | 6. specialization |

a. Using the resources of an individual, a firm, a region, or a nation to produce one (or a few) goods and services.

b. The tendency of firms and resource suppliers seeking to further their own self-interest while also promoting the interests of society in a market economy.

c. The situation where new products and production methods eliminate the market position of firms doing business using existing products or older production methods.

d. Splitting the work required to produce a product into a number of different tasks that are performed by different workers.

e. A situation in which the product the first trader wants to sell is the same as the product the second trader wants to buy, and the product the second trader wants to sell is the same as the product the first trader wants to buy.

f. Determination by consumers of the types and quantities of goods and services that will be produced in a market economy.

2. Assume that a firm can produce product A, product B, or product C with the resources it currently employs. These resources cost the firm a total of \$50 per week. Assume, for the purposes of the problem, that the firm's employment of resources cannot be changed. Their market prices, and the quantities of A, B, and C these resources will produce per week are given in the table below. Compute the firm's profit when it produces A, B, or C, and enter these profits in the table.

Product	Market Price	Output	Economic Profit
A	\$7.00	8	\$_____
B	4.50	10	_____
C	.25	240	_____

- a. Which product will the firm produce? _____
- b. If the price of A rose to \$8, the firm would _____

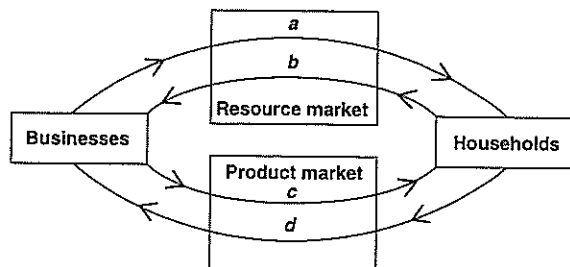
(Hint: You will have to recompute the firm's profit from the production of A.)

- c. If the firm were producing A and selling it at a price of \$8, what would tend to happen to the number of firms producing A?

3. Suppose that a firm can produce 100 units of product X by combining labor, land, capital, and entrepreneurial ability using three different methods. If it can hire labor at \$2 per unit, land at \$3 per unit, capital at \$5 per unit, and entrepreneurship at \$10 per unit, and if the amounts of the resources required by the three methods of producing 100 units of product X are as indicated in the table, answer the following questions.

Resource	Method		
	1	2	3
Labor	8	13	10
Land	4	3	3
Capital	4	2	4
Entrepreneurship	1	1	1

- a. Which method is the least expensive way of producing 100 units of X? _____
- b. If X sells for 70 cents per unit, what is the economic profit of the firm? \$ _____
- c. If the price of labor should rise from \$2 to \$3 per unit and if the price of X is 70 cents,
- (1) the firm's use of _____
- labor would change from _____ to _____
- land would change from _____ to _____
- capital would change from _____ to _____
- entrepreneurship would not change
- (2) The firm's economic profit would change from \$ _____ to \$ _____
4. In the circular flow diagram below, the upper pair of flows (*a* and *b*) represents the resource market and the lower pair (*c* and *d*) the product market.



Supply labels or explanations for each of the four flows:

- a. _____
- b. _____
- c. _____
- d. _____

■ SHORT ANSWER AND ESSAY QUESTIONS

- The command system and the market system differ in two important ways. Compare and contrast the two economic systems.
- Explain the major characteristics—institutions and assumptions—embodied in a market system.
- What do each of the following seek if they pursue their own self-interest: consumers, resource owners, and business firms?
- Explain what economists mean by competition. For a market to be competitive, why is it important that there be buyers and sellers and easy entry and exit?
- How does an economy benefit from specialization and the division of labor?
- Give an example of how specialization can benefit two separate and diversely endowed geographic regions.
- What is money? What important function does it perform? Explain how money performs this function and how it overcomes the disadvantages associated with barter.
- In what way do the desires of entrepreneurs to obtain economic profits and avoid losses make consumer sovereignty effective?
- Why is the ability of firms to enter industries that are prosperous important to the effective functioning of competition?
- Explain in detail how an increase in the consumer demand for a product will result in more of the product being produced and more resources being allocated to its production.
- Describe the production factor for businesses that determines what combinations of resources and technologies will be used to produce goods and services.
- Who will get the output from a market economy? Explain.
- How can the market system adapt to change? How is it done?
- How do prices communicate information and guide and direct production in a market economy?
- Explain how the market system provides a strong incentive for technological advance and creative destruction.
- Who "votes" for the production of capital goods, why do they "vote" for capital goods production, and where do they obtain the dollars needed to cast these "votes"?

17. "An invisible hand operates to identify private and public interests." What are private interests and what is the public interest? What is it that leads the economy to operate as if it were directed by an invisible hand?
18. Describe three virtues of the market system.
19. Explain the two major economic problems with command economies and why market economies avoid such problems.
20. In the circular flow model, what are the two markets? What roles do households play and what roles do businesses play in each market?

ANSWERS

Chapter 2 The Market System and the Circular Flow

FILL-IN QUESTIONS

- an economic system
- publicly, is central planning
- privately, are markets and prices
- property, enterprise, choice
- competition, are not
- a. independently acting buyers and sellers operating in markets; b. freedom of buyers and sellers to enter or leave these markets
- markets, prices
- exchange, wants
- a limited
- a. What goods and services will be produced? b. How will the goods and services be produced? c. Who will get the goods and services? d. How will the system accommodate change? e. How will the system promote progress?
- buy, sovereign, restrain
- least, technology, prices
- incomes, prices
- preferences, resources, guiding
- profit, loss
- capital, consumer, capital
- unity, an invisible, efficient, incentives, freedom
- decentralized, centralized, efficient, inefficient, more inadequate
- ineffective, entrepreneurship, lagged
- a. product, resource; b. real, money

TRUE-FALSE QUESTIONS

- | | | |
|-----------------|------------------|----------------------|
| 1. F, p. 30 | 10. T, p. 33 | 19. T, p. 37 |
| 2. F, p. 30 | 11. T, pp. 33-34 | 20. T, p. 37 |
| 3. T, p. 30 | 12. F, p. 33 | 21. T, p. 38 |
| 4. T, pp. 30-31 | 13. T, p. 33 | 22. T, p. 38 |
| 5. T, p. 31 | 14. F, p. 34 | 23. T, pp. 38-39 |
| 6. F, pp. 31-32 | 15. T, pp. 34-35 | 24. F, pp. 38-39 |
| 7. T, p. 32 | 16. T, p. 35 | 25. T, pp. 39-40, 42 |
| 8. T, p. 32 | 17. T, pp. 35-36 | |
| 9. T, p. 33 | 18. F, p. 36 | |

MULTIPLE-CHOICE QUESTIONS

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|-----------------|------------------|----------------------|
| 1. c, pp. 30-32 | 10. d, p. 33 | 19. a, pp. 36-37 |
| 2. c, pp. 30-31 | 11. b, p. 33 | 20. c, p. 37 |
| 3. b, p. 31 | 12. a, p. 34 | 21. d, p. 37 |
| 4. d, pp. 31-32 | 13. a, pp. 34-35 | 22. b, p. 38 |
| 5. c, pp. 31-32 | 14. c, pp. 35-36 | 23. d, p. 38 |
| 6. b, p. 32 | 15. b, pp. 35-36 | 24. d, pp. 39-40, 42 |
| 7. a, p. 32 | 16. a, pp. 35-36 | 25. d, pp. 39-40, 42 |
| 8. b, p. 32 | 17. d, pp. 35-36 | |
| 9. a, p. 33 | 18. c, p. 36 | |

PROBLEMS

- a. 6; b. 1; c. 5; d. 3; e. 2; f. 4
- \$6; -\$5, \$10; a. C; b. produce A and have an economic profit of \$14; c. it would increase
- a. method 2; b. 15; c. (1) 13, 8; 3, 4; 2, 4; (2) 15, 4
- a. money income payments (wages, rent, interest, and profit); b. services or resources (land, labor, capital, and entrepreneurial ability); c. goods and services; d. expenditures for goods and services

SHORT ANSWER AND ESSAY QUESTIONS

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|--------------|---------------|-------------------|
| 1. p. 30 | 8. pp. 34-35 | 15. p. 37 |
| 2. pp. 30-34 | 9. pp. 34-35 | 16. p. 37 |
| 3. pp. 31-32 | 10. pp. 34-35 | 17. p. 38 |
| 4. p. 32 | 11. pp. 35-36 | 18. p. 38 |
| 5. p. 33 | 12. p. 36 | 19. pp. 38-39 |
| 6. p. 33 | 13. pp. 36-37 | 20. pp. 39-40, 42 |
| 7. pp. 33-34 | 14. p. 37 | |